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## License to Extract: How Louisiana's Master Plan for a Sustainable Coast is Sinking It

Ned Randolph

**ABSTRACT** This article explores the deployment of Louisiana's highly touted \$50 billion, fifty-year Master Plan for a Sustainable Coast, which is often characterized as saving Louisiana's Working Coast of disappearing marshlands that are home to several major industry sectors, along with migratory flyways, seafood estuaries, and two million residents. As a concept, the Working Coast attempts to signify the importance of Louisiana's coastal zone to the nation's economy in order to justify expensive restoration projects. By complicating the euphemism and the extractive logic it signifies, I hope to show that the state's current approach to slow the disappearance of its coastline in fact rationalizes the very practices sinking it. The Working Coast reifies the state's fragile marshlands through metrics that can only be realized through continued extraction.

### Introduction

The French-speaking Native American tribe Biloxi-Chitimacha-Choctaw, located about fifty miles southeast of New Orleans, made international news in 2016 when it was named the recipient of a \$48 million US Housing and Urban Development grant to abandon Isle de Jean Charles, a disappearing isthmus that the tribe has lived on for 170 years. In the last half century, the land had withered from 22,000 acres to just over 300 acres. The remaining strip is surrounded by a small tidal ring levee and patches of grass dramatically converting to open water. The village is reachable by the two-lane Island Road from the Pointe aux Chenes village at the end of an obscure bayou by the same name. The access road is often submerged during storms and high tides. Isle de Jean Charles is "teetering at land's edge" like many Native American communities in Louisiana historically pushed by European settlers into the swamps and wetlands of the southern coast.<sup>1</sup> In 1998, Jean Charles was removed from a revised design of the highly anticipated "Morganza-to-the-Gulf" regional levee system that is now being built.<sup>2</sup> An Army Corps of Engineers cost benefit analysis determined it was too expensive to extend the new levee. The seventy tribal members instead won a relocation grant in Congress's Superstorm Sandy Appropriations package, earning the moniker of the first US climate refugees.<sup>3</sup> There is little doubt that sea-level rise will engulf the last stitch of Isle de Jean Charles, but its current fate as well as the loss of two thousand square miles of Louisiana marshland since 1930 are caused not by climate change but instead its predecessor: the production of Louisiana's "Working Coast." In short, the state's economic practices are sinking it.

About a third of Louisiana's geography—including New Orleans—consists of what's called alluvial delta. It was built over the last 7,500 years by the Mississippi River, which fanned across a muddy shelf of its own making, dropping silt as it meandered "like a pianist playing with one hand—frequently and radically changing course."<sup>4</sup> For the last 300 years, engineers and politicians have wrestled control over the river through levees, jetties, dredging, and other measures to prevent flooding, "reclaim" adjacent swampland for

agriculture, and provide reliable deep-water shipping into the continental interior.<sup>5</sup> This effort to hold the river within a single channel has shackled its ability to meander and replenish its coastal delta. Today, its sediment of mud, silt, and farmland runoff is jettisoned into the Gulf of Mexico, which has left the adjacent marshes vulnerable to other human-induced stressors, particularly intensive oil and gas drilling, canal dredging, and invasive species such as Nutria and Asian scale bugs. Together, these ingredients have concocted an existential crisis for Louisiana. Rates of localized subsidence and erosion fluctuate based on activity, but the US Geological Survey estimates that the state loses forty-five square miles of coastline a year. Sea-level rise will exponentially accelerate this retreat, leaving New Orleans increasingly vulnerable, while also drowning the working-class hamlets, state-recognized indigenous communities, and fishing villages that help comprise South Louisiana's unique Creole and Cajun culture.<sup>6</sup>

The Louisiana government, which presumably needs to deploy every scientific and social tool at its disposal to mitigate the upheaval of environmental and human geography, has organized its strategy for restoration around a \$50 billion, fifty-year *Comprehensive Master Plan for a Sustainable Coast*. The plan has the backing of a coalition of high profile environmentalists and industrial interests. Still only partially funded, the eleven-year-old plan frames the state's coastal wetlands as a national asset whose wetland estuaries and infrastructure supports 90 percent of the oil and gas from the Outer Continental Shelf, a quarter of the nation's petrochemicals, over 25 percent of the nation's seafood catch, 20 percent of the nation's waterborne shipping (by weight) through its five major ports, and millions of migratory birds.<sup>7</sup> The Master Plan was first passed by the Louisiana Legislature in late 2006, shortly after hurricanes Katrina and Rita devastated 220 square miles of marshlands. Catalyzed by what I call the *Katrina Effect*, which led to the bureaucratic reorganization of coastal governance, the Master Plan folds the Louisiana's eighty-year problem of coastal disappearance into an emergent strategy of hurricane protection, catalyzed by Katrina. The restoration strategy includes a multi-pronged approach: pumping dredged mud and sediment into marshes and onto barrier islands off the coast; securing shorelines with shoal barriers; heightening seawalls and ring levees around populated areas; and elevating homes. But its most ambitious proposal includes diversion spillways along the Mississippi River to "pulse" sediment back into the delta. The first two of ten such projects have been approved by Louisiana's Coastal Protection and Restoration Authority (CPRA) for an estimated \$2 billion.<sup>8</sup>

The diversions would provide a dedicated source of mud to the delta by its original progenitor, which is captured in discourses by state supported-scientists, coastal planners, and some environmentalists of returning the Mighty Mississippi to its "natural" role of land building.<sup>9</sup> Authors of the Master Plan say they are using "the best available science and engineering to prioritize and sequence projects for implementation."<sup>10</sup> But in adjudicating decisions about where and how to divvy up a limited supply of sediment, money and other resources to protect populated areas and what authors call "critical infrastructures," the Master Plan is also deeply political. Supporters frame it as the protector of Louisiana's coastal culture and industries as well as an instrument for economic diversification for struggling coastal communities. These "political rationalities" appeal to a broad cross section of stakeholders, who may otherwise be in opposition.<sup>11</sup> The plan also traffics in *extractive thinking*. It establishes in essence a future for the state's people and economy through the conditions created by the practices it supports. This paper explicates some of the ways that the state's power structure rationalizes fossil fuel production and other extractive practices for its restoration agenda, which also has implications for the physical safety of two million coastal residents. The "Working Coast" speaks to the historically extractive nature of Louisiana's industries and their deleterious effects on the environment through a neoliberal valuation of the landscape. It

commodifies nature in order to justify its preservation. While environmental crisis and even climate change are often framed through scientific discourses as technical problems, conversations in cultural studies help us think through environmental collapse as a manifestation of structural social inequality.

## Katrina Effect

The story of Katrina has been well told by better scholars. But the 2005 storm's legacy on Louisiana's governance today simply cannot be discounted. The winds and tidal surges of Hurricane Katrina and fellow Category-3 Hurricane Rita, which struck the western side of the state three weeks later, not only deluged the city of New Orleans but uprooted more than 220 square miles of coastal wetlands in its track. Industrial ports and processing facilities were drowned. Major pipelines were severed. Storm recovery efforts would require a reorganization of water and flood management, and a plan to restore the beleaguered marshes. State and city leaders pitched their recovery by framing the region as a national asset with strategic importance. They leveraged Louisiana's five deep water ports that reach the nation's interior markets. They leveraged the state's seafood estuaries. And they leveraged a massive oil and gas pipeline infrastructure.<sup>12</sup> By disrupting the Louisiana coast, the storm disrupted the economy, causing fuel price spikes and shipping delays of grain and other goods to world markets.<sup>13</sup>

The pitch worked. The federal government not only approved a new \$14.5 billion levee protection system around Metropolitan New Orleans, completed in 2010, but it recognized Louisiana coastal restoration as an essential buffer for storm protection. The storm also unleashed a series of reforms addressing "pre-existing social problems" that had little to do with hurricane protection, but they help illustrate how the levers of power can hide behind environmental destruction.<sup>14</sup> Power after all is maintained by logics that seem commonsensical and rarely questioned. "Call it the silver lining," wrote the Aspen Institute's Walter Isaacson, a native New Orleanian who was appointed by then-governor Kathleen Blanco to help lead recovery efforts. "Hurricane Katrina washed away what was one of the nation's worst school systems and opened the path for energetic reformers who want to make New Orleans a laboratory of new ideas for urban schools."<sup>15</sup> An assortment of think tanks joined reformers and newspaper editorial boards around the country to frame the catastrophe as an opportunity. Republican State Judge Joe Cannizaro called it a "clean sheet" to create a "smaller safer city." Republican Congressman Richard Baker noted in a speech to lobbyists, "We finally cleaned up public housing in New Orleans. We couldn't do it, but God did."<sup>16</sup> A state educational recovery board after Katrina took over New Orleans poorly performing public schools and brought them under a charter system. And all nine of the infamous public housing projects were torn down, substantially reducing the number of affordable units. The city began redeveloping mixed-income housing on the same footprint, offering housing vouchers to nineteen thousand of its poorest households, whose reimbursement rates have remained stagnant as rents have increased 6 to 8 percent per year. According to the New Orleans Redevelopment Authority, the majority of renters spend more than 50 percent of their income on housing—nearly two out of every five renters—which far exceeds the national average. Four out of five low-income "cost-burdened renters" in New Orleans are African American households.<sup>17</sup>

Author Naomi Klein in her book *Shock Doctrine* describes moves to privatize and marketize public services as a form of post-shock opportunism that allows for "orchestrated raids on the public sphere in the wake of catastrophic events, combined with the treatment of disasters as exciting market opportunities."<sup>18</sup> If anything Hurricane Katrina provided a visual narrative of historic geographic and racial inequality in New Orleans, which continues to persist today. An examination of flood maps show that

Katrina rendered the heaviest damage to lower-lying African American neighborhoods. Of course, it wasn't God that flooded them; the flooding was the result of racial economic and geographic inequality through drainage politics and historic segregation. In the earliest days of New Orleans, most settlement followed the Mississippi's snaking embankment along the highest alluvial ridge, which was easily overtaken by seasonal floods and storms. Levee construction and drainage ditches directed water to the lower-lying swamplands "back-of-town" towards Lake Pontchartrain, which was described as a thin "gruel" of water and organic matter that shrank and settled when drained.<sup>19</sup> Before 1900, the city's black population typically occupied these swampy portions.<sup>20</sup> Urban expansion away from the river required the lowlands to be "reclaimed" from the swamps. This demanded drainage infrastructure, which in turn allowed further expansion. The Drainage Commission of New Orleans formed in 1896 undertook an ambitious Progressive Era citywide drainage program of pumping stations and canals. Louisiana State University scholar Craig Colten points out that the coinciding Jim Crow policies challenged emerging Progressive principles of social equity by prohibiting the movement of African Americans and denying services to non-white neighborhoods. The constraints of Jim Crow meant that even when black New Orleanians received drainage and sewerage services by the 1930s, they were limited to the lowest sections of the city.<sup>21</sup>

Most of the city's rear cypress swampland was subdivided between 1900 and 1920, triggering a real estate boom and 700 percent increase in the city's urban acreage. Additional lowland lots were developed after World War I, and the remaining balance was built out following World War II between 1946 and 1975. In fits and starts, the practice of draining swamplands for neighborhood development continued through the late 1980s, which also opened neighboring parishes to white flight suburbanites fleeing school desegregation. That in effect left the city with a growing proportion of poorer African Americans.<sup>22</sup> The drainage system was so successful in removing water from the soil that it opened up air cavities, which in turn allowed organic matter to decompose, shrink, and create more cavities.<sup>23</sup> The Crescent City, so named for the wide crescent-like bend in the Mississippi River, had been transformed into a fortified bowl surrounded by water. Its edges were ringed by levees. Internal ridges that were built by old river meander paths prior to the levees, like Esplanade and Metairie ridges, sat a bit higher near sea level and were home to affluent neighborhoods. The city's working-class neighborhoods, the majority of them African American, sat in the lowest area of elevation that flooded in heavy rain—in essence at the bottom of the bowl.<sup>24</sup> Pumps originally located behind populated areas—but which now found themselves surrounded by them—expelled runoff into the lake through outfall canals that increasingly rose above the subsiding neighborhoods. "Unbeknownst to new residents, their exposure to hazard grew with every centimeter their neighborhoods sank, as did their dependence on pumps and barriers to prevent rainwater or sea water from pouring in."<sup>25</sup> This perpetuated a cycle of ground water removal and vulnerability, so that by the time Katrina struck in 2005, half of New Orleans sat below the level of the sea "by one, two, three, up to five meters."<sup>26</sup> The city's twenty-four colossal drainage stations had the pumping capacity to empty a 13.5-foot deep, ten-square mile lake every twenty-four hours through the same urban canals that channeled Katrina floodwaters into the heart of the city, a devastating dialectic of urban ecology.<sup>27</sup>

By the end of the morning of August 28, there were nearly fifty separate breaches to the regional levee system. The worst hit neighborhoods lay in New Orleans East, flooded through a controversial shipping canal built by the US Army Corps of Engineers in the 1950s. Known colloquially as MR-GO, the seventy-six-mile Mississippi River Gulf Outlet cut through the wetlands for smaller vessels seeking to avoid the yawning turns of the Mississippi. But MR-GO required regular dredging and was long criticized by

environmentalists for its aggressive erosion. Katrina floodwaters surged through MR-GO through the back door of New Orleans, and T-boned into the Industrial Canal at the Lower Ninth Ward levee, a working class African American neighborhood, where income averaged \$16,000 a year.<sup>28</sup> “It would be the Lower Ninth Ward—a mixed-race community before school desegregation, but ninety-eight percent black at the time of Katrina—that stood as a synecdoche for anyone debating the rebuilding question” after the storm.<sup>29</sup>

The social and environmental degradation caused by Katrina (and later Rita), led to a reorganization of Louisiana governance. In the fall of 2005, Louisiana Governor Kathleen Blanco created the bi-partisan Louisiana Recovery Authority to direct post-storm recovery efforts, which more than doubled congressional appropriations for Louisiana to \$28 billion.<sup>30</sup> The byzantine levee board system was consolidated into regional districts with required expertise in flood protection.<sup>31</sup> That November, the Louisiana Legislature created the Coastal Protection and Restoration Authority (CPRA) to reorganize and oversee all of the state’s ad-hoc coastal activities. The CPRA became a critical player in securing federal funds in housing, environmental support, transportation and marine and flood protection. Its first task was drafting a comprehensive plan to address coastal erosion and flood protection. That Master Plan was approved by the state legislature in late 2006. It was called a working document with an “adaptive management framework” to be updated every five years, later changed to six.<sup>32</sup>

## Conditions of Possibility

The resulting Master Plan, instead of moving away from *extractive thinking*, allows for the continued historic practices that led to the conditions it was created under and which guarantee its future necessity. The plan to sustain Louisiana’s Working Coast is inextricably tied to Louisiana’s coastal industries through its funding mechanisms, political rationalities that organize its logic, and political ecologies that render the region more vulnerable. Its largest source of recurring revenue comes from royalty collections on oil and gas platforms in federal waters. The Gulf of Mexico Energy Security Act passed by Congress in the wake of Katrina provides up to \$170 million annually.<sup>33</sup> In 2006, Louisiana voters constitutionally dedicated GOMESA revenues to Louisiana’s Coastal Protection and Restoration Trust Fund for the sole purposes of “integrated coastal protection”—which includes coastal restoration, hurricane protection, and improvement of infrastructure directly impacted by coastal wetland loss (such as pipelines).<sup>34</sup> Tying oil royalties to mitigate damage caused to the coast on its surface may seem appropriate. The inverse of that logic is also true: it turns the restoration authority into advocates for an industry that has shredded the state’s wetlands and increased the danger of sea-level rise.<sup>35</sup> For example, in October 2017 coastal officials announced that restoration projects would have to be scaled back due to falling global petroleum prices, which reduced the state’s royalty check from the federal government. In response, the governor’s coastal adviser Chip Kline said there was reason to be hopeful because Department of Interior Secretary Ryan Zinke was about to announce the largest offshore oil and gas lease sale in history: seventy-seven million acres in the Gulf of Mexico. He said, “Zinke was here in Louisiana a couple of weeks ago, and he promised to help us move some of our much-needed coastal projects forward. He gets it.”<sup>36</sup> More drilling will place more pressure on pipeline routes through the marsh and add carbon dioxide to the atmosphere.

The plan also relies on revenues from a legal settlement to Gulf Coast states impacted by the 2010 BP Deepwater Horizon well disaster that killed eleven people and poured 210 million gallons of crude oil into the Gulf of Mexico.<sup>37</sup> Louisiana will receive up to \$5 billion over fifteen years through the RESTORE Act (Resources and Ecosystems Sustainability, Tourist Opportunity, and Revived Economies of the Gulf Coast States Act of 2011), which

Mark Davis, the director of Tulane's Institute on Water Resources Law and Policy, called analogous to "paying for a gym membership by winning pie-eating contests."<sup>38</sup>

The Master Plan creates the conditions for its own possibility in other ways. It funds ring levees that protect coastal communities from flooding in the short term but disrupt the hydrological "sheeting" of sedimentation that maintains healthy estuaries. Levees not only entrap water after storms, but they encourage development in flood plains. Communities surrounded by levees are dependent on electric drainage pumps to remove floodwaters. Ultimately this cycle of water removal dehydrates organic soils and causes land within levee systems to sink. In coastal Louisiana, communities protected by levees have dipped as much as ten feet below sea level, which then leaves them more vulnerable and imminently harmed by catastrophic flooding.<sup>39</sup> Ecologically speaking, the vulnerability of these social geographies is reinforced by their protection, which requires subsequent intervention.

We can also look to the plan's governing logic that operates through what scholar Wendy Brown calls "political rationality."<sup>40</sup> In addition to restoring the coastline and protecting the oil industry, advocates for the plan tout its ancillary economic benefits in the form of a "water jobs cluster" that can be exported to other areas afflicted by sea-level rise and environmental decline. They frame the Master Plan as an investment vehicle that will diversify the state's economy. The 2012 Master Plan update cites various studies that tout positive returns on workforce investment in water management, including a study by the LSU/Louisiana Workforce Commission claiming that \$618 million spent in 2010 by the state on coastal restoration created nearly 9,000 direct and indirect jobs and \$1.1 billion in sales and a study by Duke University that argued coastal restoration spurs investments and jobs in shipbuilding, equipment repair, and manufacturing—as long as the state maintains a steady investment to entice private sector investments. The CPRA claims that investing in coastal restoration provides other long-lasting benefits to local economies, such as higher property values, better water quality, sustainable fisheries, and increases in tourism dollars. These arguments provide the political rationality for the Master Plan itself.<sup>41</sup>

Windfalls of federal and state money are also changing the institutional landscape. Tulane University in New Orleans recently opened a "water campus," called the Center of Academic Excellence for Research and Partnerships, to capture CPRA grant funding and foster collaboration among coastal researchers.<sup>42</sup> The new campus is also partnering with the entrepreneurial community that sprouted up post-Katrina, such as the technology business incubator Propeller, which sponsors award contests and business challenges for "water entrepreneurs."<sup>43</sup> The state of Louisiana in January 2018 opened a water campus in Baton Rouge to house the CPRA and its research arm, the Water Institute of the Gulf, which awards contracts to universities and other third party researchers, and carries out its own environmental studies for CPRA projects. The Water Campus includes other tenants carrying out CPRA design, research, and land-building efforts. The sleek thirty-five-acre campus opened to press and fanfare touting that its presence will bolster a blighted area adjacent to downtown Baton Rouge and help elevate the city's business climate.<sup>44</sup> The campus is promoted through glossy brochures featuring shared workspaces overlooking along the Mississippi River.

Recently, stakeholders have been attempting to entice more private investors into the restoration game through financial incentives. A new kind of environmental performance bond has been proposed by the Environmental Defense Fund that would attract financial organizations to bond CPRA projects against future revenues, allowing the state to implement projects earlier, and reward contractors with a financial bonus for building projects that exceed the scope of performance of the project.<sup>45</sup>



Political rationality brings together disparate interests under a governing form of reason, which once it takes hold, promotes the interests of that logic. Brown argues that political rationality gives impetus to political actions, regimes, and everyday practices (or even violence) that are outside of the intentionality of the participants. They are not necessarily attributable to ideology or material conditions. “Political rationality is not an instrument of governmental practice, but rather the condition of possibility and legitimacy of its instruments, the field of normative reason from which governing is forged.” The Master Plan has become the normative form of reason for the benefits and opportunities it provides.<sup>46</sup> It helps explain how seemingly incompatible schemes—and players — can join forces and serve to provide legitimacy to its logic.<sup>47</sup>

For example, the Master Plan also enjoys the support of the powerful shipping lobby because it discursively and materially maintains the “Mighty Mississippi River” as a principle engine of commerce.<sup>48</sup> It rationalizes dredging the Mississippi River channel for in order to pump “mud slurry” into endangered marshes. In August, the Army Corps of Engineers agreed to deepen the Mississippi River channel by fifty feet to the celebration of shipping interests such as the Big River Coalition, whose membership includes an assortment of port operators, petrochemical refineries, and shipping companies that advocate using dredged material for marsh restoration.<sup>49</sup> Port officials have been asking for a deeper channel to attract the larger Panamax ships coming through the new Panama Canal deep lock. The Panama project, opened in 2016 and linked to massive deforestation and environmental displacement in that country, has set off a proverbial arms race among US ports.<sup>50</sup> As southern port facilities expanded to receive bigger ships than had previously sailed around the tip of South America, Louisiana officials clamored for the Army Corps of Engineers to deepen the Mississippi River to keep its ports competitive. Louisiana Republican Congressman Garret Graves, the former CPRA executive director and now on the House Transportation and Infrastructure Committee, said the channel deepening project could qualify as a coastal restoration project, allowing restoration money to cover Louisiana’s local match with the Corps.<sup>51</sup>

Through this reliance on and rationalization for extractive practices, the plan is both an antidote and product of the same *extractive thinking* that calls forth its existence. It produces the way out of a crisis by continuing the conditions of possibility that caused it. For instance, the CPRA is spending billions of public dollars to protect Louisiana’s extractive coastal industries even as recent geological surveys suggest that the rate of sea-level rise is twice that estimated in the 2012 Master Plan update. It may overtake the ability of the planned diversions to rebuild land.<sup>52</sup> State officials admit the publicly-funded interventions will not restore the entire “boot” of Louisiana or many of the vulnerable communities along the coast. Therefore, one might wonder what are the interventions sustaining? It seems clear that they are sustaining the industrial activity and assets that make the coast a viable site of investment for continued intervention.<sup>53</sup> They are sustaining a rationale for intervention.

## The Governing Logic

The governing logic of the Master Plan and the “Working Coast” reproduces the ongoing dialectic of depending on a diminishing landscape for one’s livelihood, which further diminishes the landscape. If the wetland estuaries continue to transform into open water, the state’s robust seafood industry will collapse. One could argue that oil and gas development and other heavy industry is actively transforming a landscape into one that can only support those industries. This dialectic “metabolism” that has transformed the coast into capitalist production has consumed the very milieu onto which this production

has taken place.<sup>54</sup> New political rationalities and discourses of economic diversification for hard hit parishes help further justify investments in the Master Plan.

As an instrument of restoration, the Master Plan could be thought of as an extraction machine. It fails to call for reduction in oil and gas production that has left more than ten thousand miles of canals open to salt water intrusion and “ponding” effects that have been associated with a third of all wetland losses.<sup>55</sup> It contains no projects to backfill oil and gas canals, which have been identified as a “low tech” solution and embraced by previous restoration plans.<sup>56</sup> Leaving canals untouched satisfies oil interests as well as the faction of few but powerful private landowners whose access canals and wells either produce steady royalty checks or may again in the future with newer drilling technology or increased market prices.<sup>57</sup> An estimated 80 percent of coastal land in Louisiana is privately held, most of it by a handful of large landowners residing outside of Louisiana. Conoco, for example, owns seven hundred thousand acres.<sup>58</sup> Randy Moertle, who represents a consortium of six south Louisiana landowners that collectively own 185 thousand acres and sit on several stakeholder coalition boards, including America’s Wetland and Ducks Unlimited, said that backfilling canals is extremely unpopular among them.<sup>59</sup> Backfilling is also unpopular with fisherman, said Jim Tripp with the Environmental Defense Fund, who characterized backfilling canals as “robbing Peter to pay Paul” because the sediment would have to come from somewhere. The lack of sediment is an ongoing constraint cited by coastal planners. Even river sediment—if directed into the marsh—contains about half the volume it once did because of urban hard scape development throughout the Mississippi River Basin.

Backfilling canals also is too individualized to be considered as part of the large scale systemwide approach the Master Plan takes, according to Denise Reed, one of the plan’s authors.<sup>60</sup> Creating a backfill program would require a large mobilization effort to directly siphon mud to small amounts of material to different places, she said. Meanwhile, Mark Davis, one of the early coastal restoration advocates, says that the longer backfilling is neglected, the less sediment is available for it. When the state was first considering backfilling in the 1980s, the “spoil bank” ridges of mud cuttings along the side of canals could have been pushed back into the water channel and prevented subsequent saltwater intrusion and provided platforms for vegetative growth. Those solutions were actively fought by the oil and gas lobby, and many were screened out of the 2012 Master Plan update. Today many of the banks themselves have compacted into the eroding conditions they helped cause through hydrological disruption.<sup>61</sup> Their neglect has been productive for political interests that resist them.

As an extraction machine, the Master Plan also fails to build upon findings by US Geological Surveys on subsidence “hot spots” in the marsh that correlate to periods of rapid removal of oil crude that may have been caused by either depressurized well cavities beneath the surface or from deep well brine that may have triggered subterranean fault activity.<sup>62</sup> There is no public discussion by coastal planners to re-pressurize old wells with fluid to halt subsidence as is required in California and other places.<sup>63</sup> Instead the Master Plan focuses on implementing system wide projects like diversions—which have been met with resistance by many coastal communities whose residents rely on the brackish estuaries for seafood harvesting, oyster farming, and fishing. Diversions are called by opponents unpredictable, slow, and expensive. Two pilot diversion projects created in the 1990s by the Coastal Wetlands Conservation Grant Program or “Breaux Act” have produced mixed results.<sup>64</sup> Public forums held by the CPRA in coastal communities are often punctuated with heated discussions and acrimony, resulting in what Craig Colten calls a “democratic deficit.”<sup>65</sup> Fishermen and oyster farmers argue that diversions will decrease salinity and destroy the harvests and fishing grounds



vital to coastal livelihoods and dismantle living oyster reefs that act as wave breaks. Beyond that, some communities in the path of diversions will be forced to move because of increased water levels.<sup>66</sup> Others are concerned about pollutants from the Mississippi River. While there is evidence supporting the efficacy of marshes to filter municipal effluence, for instance,<sup>67</sup> it is unclear if Louisiana's degraded marshes can filter the what's flowing down the Mississippi River—referred to in Mark Twain's time as the "Great Sewer."<sup>68</sup> Currently, farm pesticide and nutrient runoff at the river's mouth generates a hypoxic "dead zone" of algae whose plume rivals the size of New Jersey and consumes enough oxygen to suffocate marine life.<sup>69</sup> In a recent example of resistance, the local government of Plaquemines Parish tried to withhold permission for the state to take soil samples for its \$1.4 billion diversion structure that could send as much as seventy-five thousand cubic feet per second of sediment-laden freshwater from the Mississippi into brackish Barataria Bay. In response, the state threatened to withhold other restoration projects until the local government complies with its requests.<sup>70</sup> Meanwhile, there exist a contingent of researchers who argue that building sediment diversions without addressing the thousands of miles of oil and gas pipeline canals throughout the coast may actually increase subsidence.<sup>71</sup> It leaves one speculating that research questions outside of acceptable political parameters of supporting the "Working Coast" have been effectively sidelined.

## Science versus Ideology

As an individual case, Louisiana reflects the larger social and environmental impact of twenty-first century energy policy. It has fostered a plan that deploys science for coastal restoration efforts that ends up rationalizing the state's petro-economy. It relies on commonsense that participates in an existing global logic that is reproduced through international oil and gas production networks where oil companies either extract without hindrance<sup>72</sup> or engage in what Toby Miller describes as a "social license to operate" purchased by other goodwill offsets.<sup>73</sup> This "Greenwashing Effect" is particularly insidious in Louisiana as both one of the nation's largest producers of fossil fuels and singularly vulnerable to sea-level rise caused by greenhouse gases. Louisiana's coast constitutes 40 percent of the US coastal marshes and 80 percent of its losses.<sup>74</sup> Greenwashing allows corporations to act as good stewards even though their primary concern is extracting profit for shareholders at minimal costs. In greenwashing campaigns, corporations routinely describe themselves as citizens, while principally pursuing economic interests, argues Miller. "Their restless quest for profit unfettered by regulation is twinned with a desire for moral legitimacy and free advertising—based on "doing right" in a very public way, while growing rich in a very private one."<sup>75</sup>

I recently attended a meeting of America's WETLAND coalition, comprised of high profile environmentalists, landowners, and restoration planners, at Nicholls State University, fifty miles southeast of New Orleans at the steps of Terrebonne Parish's receding coast. The meeting was sponsored by the international mining and petroleum company BHP (formerly BHP Billiton). A spokeswoman for the Australian-based multinational corporation said they intended to operate in the Gulf of Mexico for decades to come. "Part of who we are is sustainability and partnering. We want to make sure that we are part of a stewardship to leave things in a better position than when we arrived."<sup>76</sup> In February 2017, BHP invested \$2.2 billion into the new "Thunder Horse" water injection platform owned by BP, which marked BP's first project in the Gulf of Mexico since its 2010 Deepwater Horizon oil disaster, which is still the largest marine oil spill on record.<sup>77</sup> At the WETLAND meeting, Rachel Archer, who is BHP's general manager for Gulf of Mexico operations, stressed their commitment to social responsibility. "We need to be able to demonstrate we are responsible, be good stewards."<sup>78</sup> She pointed to the company's

international presence as a point of its stewardship. “We are global mining, and petroleum –beneficiaries of these resources all over world. That comes with a social responsibility.” BHP is currently embroiled in multiple class action lawsuits totaling tens of billions of dollars for its role in the 2015 Mariana mining disaster that is called the worst environmental disaster in Brazil’s history. The collapse of the massive Fundão dam unleashed nearly 16 billion gallons of iron ore waste and triggered a toxic mud slide that killed nineteen people, destroying three towns and contaminated 280 miles of river across two states.<sup>79</sup> BHP was also fined \$25 million by the US Securities and Exchange Commission in 2015 related to its “hospitality program” at the 2008 Summer Olympics in Beijing that provided 176 government- and state-owned-enterprise officials an all-expenses-paid package to attend the Games. The SEC found the company violated the Foreign Corrupt Practices Act by inviting officials from at least four countries where BHP had interests in influencing the officials’ decisions.<sup>80</sup>

It’s challenging to be a good local steward when the profit centers and headquarters of companies are thousands of miles away, says Mark Davis. Louisiana is full of “middle managers.” Under the current legal architecture, oil producing landowners are simply incentivized to turn areas into what Julie Maldonado calls “Sacrifice Zones.” In sacrifice zones, human lives are valued less than the natural resources extracted from a place.<sup>81</sup> Such extraction activity generates shareholder profits and state tax revenues. Rapid resource extraction that denudes the surrounding area makes those within the sacrifice zone increasingly vulnerable and marginalized, causing further economic or physical displacement. Maldonado points to the displacement of Isle de Jean Charles as a result of social and economic inequality—resulting from a lineage of decisions and values that privileged corporate interests and distant shareholders over local users who depend upon local resources.

In sacrifice zones, the levers of power are hidden by seemingly natural or ecological disasters such as hurricanes, oil spills, and other hazards that are worsened from poor regulatory oversight, improper compensation, and cultural disregard to certain communities already living on the margins. Examples abound in Louisiana of environmental injustice for poor communities that lack political, legal, or educational capital to fight harmful projects that further marginalize them. Consider the plight of poor residents in western St. James Parish, set between Baton Rouge and New Orleans, on an eighty-five-mile stretch of Mississippi River that hosts a cluster of petrochemical plants known not so affectionately as “cancer alley.”

The St. James Parish Council split 5-4 in August 2017 to allow the state-permitted Bayou Bridge Pipeline project by Energy Transfers Partners, owners of the Dakota Keystone pipeline, to acquire land needed to reach its destination in the petrochemical cluster on the west side of the river. The \$670 million project would funnel 480 thousand gallons of crude oil daily to East St. James Parish, cutting sixty-two miles across south Louisiana through the sensitive Atchafalaya Basin wetlands. The project is opposed by a small collection of landowners resisting rights of way for the project as well as the nonprofits Atchafalaya Basinkeeper and the Louisiana Crawfish Producers Association-West who say the dredging and ditches for the pipeline are ruining the landscape and destroying their livelihood.<sup>82</sup> Bayou Bridge will soon be joined in St. James Parish by a proposed \$9.4 billion ethylene oxide plant by Formosa Petrochemical Corporation, which received \$207 million in tax break subsidies from the state that perennially ranks at the bottom in environmental and public health on every major index.<sup>83</sup>

A recent geographic information system (GIS) mapping study revealed that the polluting industries in St. James are located in the sections with the highest percentages of African Americans, the lowest average household income, and the most residents without a high

school diploma. Meanwhile, the areas of the parish with the highest percentage of residents employed by manufacturing industry tend to be the wealthiest, have the least number of African American residents, and have the most residents with the highest levels of education.<sup>84</sup> In neighboring St. John the Baptist Parish, a recent US Environmental Protection Agency assessment found that areas on the poorer east side of the Mississippi River are at more than twice the risk for certain cancers than their neighbors on the west side, where there are fewer petrochemical facilities. Three years ago, the EPA declared that St. John had the highest cancer risk from airborne pollutants nationwide because of the “likely carcinogen” chloroprene manufactured along the Mississippi River. Just downstream in St. Charles Parish, scientists say residents in one census tract face the highest risk in the country of developing lymphoid or breast cancers from chloroprene.<sup>85</sup>

In order to understand environmental degradation and displacement as what Maldonado calls “tacit persecution,” we must understand how such conditions are created. A political ecology of Louisiana history helps us de-naturalize bad air and weather. Just as God didn’t create a clean slate after Katrina, the social and environmental exploitation by the oil and gas industry has roots in earlier landscape exploitation. According to Diane Austin, the sugar and timber industries, along with the water development projects created to protect them, set the stage and established the actors for oil and gas. Land wrestled from the swamps through levee and drainage programs coincided with the cultivation in the mid-19th century of sugar plantations. Sugar producers imported large numbers of African slaves, which created a rural population outside New Orleans that outnumbered white residents by three to one. Incited by competition from Cuban and West Indies sugar producers, Louisiana planters intensified cultivation and increase economies of scale through land consolidation and new equipment technology such as steam and rail transportation.<sup>86</sup> New Orleans merchants purchased sugar that was cultivated by slave labor and carried by steamboat powered by wood.

The steam age reached its height by the late 1840s. “From 1850 to 1860, planters seized rich levee crests, drained swamps, constructed canals, dredged rivers, and acquired their neighbors’ properties.” The average size of farms in neighboring St. Mary Parish, for example, nearly doubled, from 230 acres in 1850 to 413 acres by 1860.<sup>87</sup> By that time, Louisiana planters were producing one-fourth of the world’s sugar and were among the south’s wealthiest slaveholders.<sup>88</sup> The sugar boom and demand for timber decimated the state’s old growth timberlands. The introduction of the railroads also provided direct access to logging—while disrupting the ecology of the marsh through levee spoil banks that impounded water. Throughout the early 1900s, lumber companies established camps and communities to house workers, mostly blacks and Cajuns, who received low wages or “scrip” payments for long hours and dangerous work. Workers frequently remained indebted to the company store. Their employers occupied key positions in local banks, city and state government, and ship channel companies. Because most of the logging occurred on private land, there was little opportunity for public dissent. Those working in the forests were widely dispersed,<sup>89</sup> and timber companies moved quickly, clearing one stand to the next. This “pulse” of logging between 1876 and 1956 all but eradicated the cypress forests in Louisiana.<sup>90</sup>

By the early 1930s, just one percent of the cypress forests remained, and the industry was almost completely gone.<sup>91</sup> However, deforestation coincided with rise of oil, discovered in Louisiana in 1901. The state of Louisiana issued the first coastal zone oil lease in 1921. Land development companies began acquiring huge tracts of swampland, which also prompted timber and fur companies to hold onto land and lease it for exploration. In fact,

the oil boom promised that even land too wet for agricultural or timber had potential value for what lay below their surface in the form of mineral rights.

Over at Isle de Jean Charles, tribal members were up against the power of private developers and oil companies backed by the state who forced the residents to sign leases in English for mineral rights they could not read or understand, as most of them did not speak the language. Other tribal members who failed to pay property taxes forfeited their mineral rights to the state which then sold them to oil corporations.<sup>92</sup> Without land rights in a sacrifice zone, the tribe could not initiate reclamation projects to buffer their immediate property since reclamation projects must be initiated by the landowner and approved by the state.<sup>93</sup> The intense production of the surrounding fields from hydrocarbon withdrawal and dredged canals led to extreme subsidence and erosion.<sup>94</sup> In 1955, the Isle de Jean Charles comprised more than 22,000 acres, which had been enough land for the community members to farm, trap, and shelter from storms off the Gulf of Mexico. Today, the remaining 320 acres are surrounded by a watery landscape dotted with refinery tanks, flaring gas lines, and pipeline signs warning against anchoring. The Army Corps of Engineers determined it was cheaper to move the people rather than extend the levee. However, to add insult to injury the state-recognized tribe has not yet received federal recognition, which has held up funding for the \$48 million resettlement grant.<sup>95</sup>

Louisiana coastal planners and economic officials point out that the state has strengthened its regulatory oversight for oil production in recent years, and drillers can reduce environmental impacts with improved technology such as directional drilling. Besides, the big oil patch today resides well offshore from the coastal marshes. Most of the inland coastal oil drilling has passed peak production, even though the canals remain open, and the wells uncapped. Yet there is a new kind of energy patch in the western corner of the state. A boom in liquified natural gas (LNG) is happening in the southwestern Chenier plain, which is also threatened from eroding pipeline and navigation canals. More than \$90 billion of LNG projects and pipelines are in various stages of construction or planning in the Chenier.<sup>96</sup>

It seems pretty clear that in Louisiana, environmental sustainability signifies sustaining a healthy business environment at the expense of other ecologies of social and environmental health. Discourses of sustainability flow throughout the state's Master Plan and discussions of the Working Coast. It is arguably the neoliberal valuation of the plan that has coopted imagined futures of Louisiana's wetlands. Sustainable discourse is easily partnered in neoliberalism because it commodifies nature in an attempt to reconceive it as a scarce resource order to save it.<sup>97</sup> Arturo Escobar, who traces sustainable development discourse to a United Nations report in the late 1970s, says sustainable discourse reconciles two old enemies—economic growth and the preservation of the environment—without any significant adjustments in the market system. "This reconciliation is the result of complex discursive operations of capital, representations of nature, management and science. In the sustainable development discourse nature is reinvented as environment so that capital, not nature and culture, may be sustained."<sup>98</sup> The political reconciliation hides the fact that the current economic framework itself cannot hope to accommodate environmental concerns without substantial reform or conservation. In fact, it argues for the opposite. Through an effective greenwashing campaign, the industrial polluters and oil companies that have operated for years in the Louisiana wetlands and Gulf of Mexico joined forces with environmentalists in the early 2000s to successfully underwrite a national campaign that framed the oil industry not as the cause of land loss but one of its victims. We can locate the deployment of the "Working Coast" precisely to this campaign, which was developed

after efforts failed in 2000 to win federal support for the state's first comprehensive restoration plan, called Coast 2050.

## Seeds of the Master Plan

First passed in 1998, Coast 2050 emerged through a groundswell of community organizing in the decades of the 1980s and 1990s as local environmentalists and industrial interests sparred over causes, and culpability, of land loss.<sup>99</sup> Coast 2050 contained an “eco-system” view of restoration and environmental management. It also named oil and gas canals as critical causes of coastal erosion and called for cutting gaps into mud “spoil banks” ridges on canals to release entrapped water. It was the first restoration plan to anticipate the role of sea-level rise on the coastal delta. And it included the ambitious Third Delta Conveyance Channel—which was a \$2 billion proposal to produce a new river channel off the Mississippi River to replenish the marsh.<sup>100</sup> All twenty coastal parishes passed resolutions of support. Once passed, the Louisiana delegation was tasked with finding money for the \$14 billion, fifty-year price tag. The state pinned its efforts to a long-standing grievance with the federal government on offshore royalty collections. The Louisiana Democratic Senator Mary Landrieu, who was friendly with the industry, introduced the Conservation and Reinvestment Act (CARA) of 1999. She argued that Louisiana supported ninety percent of offshore development in the Gulf for more than fifty years and benefited from decades of economic activity, but had “not received appropriate compensation for the use of its land and the environmental impacts of this production.”<sup>101</sup> Since more than eighty percent of oil and gas activity in the Gulf of Mexico had taken place for decades beyond Louisiana's three-mile territorial waters, the state received a fraction of the compensation as it did on inshore wells. It shared federal royalty collections equally with all inland states hosting pipelines.<sup>102</sup> “These areas and their fragile environments in Louisiana were sacrificed long ago for the benefit of industry investment and development,” Landrieu said. “I intend to ensure that these areas will be ignored no longer.”<sup>103</sup> The act would have boosted Louisiana's annual share of offshore revenues to about \$200 million for fifteen years, far more than the \$40 million a year dedicated to restoration projects under the so-called “Breaux Act” passed in 1990. Louisiana's Secretary of Natural Resources Jack Caldwell cited the Houma Navigation Channel as an example of a federal waterway built mainly to service the Outer Continental Shelf that caused erosion of several square miles of land in south Terrebonne Parish over three decades. “In addition, the Louisiana coast is crisscrossed by 14,000 miles of pipelines,” he said.<sup>104</sup> In the past, Louisiana's energy lobby had steadfastly denied the long-term impacts from dredging and drilling.<sup>105</sup> But CARA did not increase royalties paid by the industry. It instead asked for a larger share of existing collections.

In the spring of 2000, Congress took up the legislation along with an environmental bill for Florida's Everglades: the Comprehensive Everglades Restoration Plan (CERP), which was a twenty-year, \$7.8 billion federal request. Congressional support for Louisiana's bill began to wane in early 2000 as anti-drilling proponents believed that revenue sharing might stimulate offshore drilling.<sup>106</sup> Landrieu's amendment failed and with it a federal partnership. But Florida's bill passed. A pair of Louisiana coastal planners attributed Florida's success to a “linchpin issue” that bound disparate groups behind a common message and shared commitment. Florida's linchpin issue rested on the municipal water supply for south Florida's twenty million people. Louisiana's linchpin issue was different. “While the loss of so much physical habitat would be dire, environmental concerns alone are not sufficient to warrant the billions needed for comprehensive restoration,” they said.<sup>107</sup> So how to convince Congress that Louisiana's coast—similar to Florida's coast in terms of size, rate of disappearance and ecological inventory—was important? “The

relevant question is: Can Louisiana convince the national interest that a “working coast” is worth saving?”<sup>108</sup>

James Tripp of the Environmental Defense Fund, who had helped form the Coalition to Restore Coastal Louisiana (CRCL) in the 1980s that ultimately led to Coast2050, suggested they approach his old friend and prep-school classmate, the New Orleans banker King Milling, who had deep roots in Louisiana landownership and oil and gas interests.<sup>109</sup> Milling was the president of Whitney Bank and former king of Rex, the preeminent Mardi Gras Krewe in the city. Tripp and Mark Davis, the new head of (CRCL) with a background in real estate development appealed to Milling on his own terms: Whitney Bank’s “collateral” of oil and gas infrastructure was disappearing into the sea.<sup>110</sup> Milling soon became the public face for the coalition and Louisiana coastal restoration writ-large. “He spoke well, looked the part, and was patently sincere. He saw no conflict between saving his coast and protecting his industry. They were one and the same thing.”<sup>111</sup>

In 2001, Republican Governor Mike Foster formed the “Committee on the Future of Coastal Louisiana,” which in February 2002 submitted its report, “Saving Coastal Louisiana: A National Treasure, Recommendations for Implementing an Expanded Coastal Restoration Program.” Milling chaired the new Governor’s Advisory Commission on Coastal Protection, Restoration and Conservation. Also in 2001, Governor Foster organized a major coastal summit in Baton Rouge. At the summit, Milling said the cost of coastal erosion should be told in dollars, commercial impact, and cultural values. “Oil and gas platforms and facilities, including pipelines . . . will have to be either rebuilt or totally replaced.”<sup>112</sup> On August 27, 2002, Governor Foster announced a campaign to increase national awareness of the state’s dramatic coastal land loss, America’s WETLAND: Campaign to Save Coastal Louisiana. It was funded by a \$3 million donation from Shell. “Although the entire nation depends on Louisiana’s coastal wetlands for its energy production, seafood harvest, leading port system and wildlife habitat, very few people know they even exist,” said Foster.<sup>113</sup> Milling became the spokesman for America’s WETLAND Foundation:

He stated his conviction early and often: coastal stakeholders needed to form a new band of brothers and fight towards a common objective: securing federal (public) funding to restore the zone.<sup>114</sup>

What followed was a massive, industry-led public relations campaign. America’s WETLAND partnered with Marmillion & Company, a national strategic communications firm. A media buy was committed by TIME for KIDS and an educational video that premiered at the 2002 Southern Governor’s Association Conference in New Orleans stressing the importance of “America’s Wetland” to the nation’s energy and economic security and its world ecological significance.<sup>115</sup> Two days after the governor’s presentation, Tripp’s Environmental Defense Fund praised the America’s WETLAND campaign as an important step toward “informing Americans about the value of vast but threatened coastal wetlands created by the Mississippi River.” The focus of the new effort to restore the coast would focus squarely on river sediment and the past practices of the US Army Corps of Engineers to levee the river and not on curtailing commercial activity in the marsh itself. “Instead of being dumped off the continental shelf, river sediment should be diverted and used to rebuild wetlands,” Tripp said in EDF’s release. “We support the Governor’s efforts to raise awareness about the plight of the wetlands and the federal funding needed to develop and implement a comprehensive, science-based restoration plan.”<sup>116</sup>



Tripp and EDF recruited the National Wildlife Federation and National Audubon Society into the campaign.<sup>117</sup> America's WETLAND sponsored international wetland science summits, organized congressional briefings, and recruited corporate sponsors. A successful campaign, they said, "will require that Louisianans speak with a unified voice and exhibit a strong commitment to paying the state's share of restoration costs."<sup>118</sup> At an early commission meeting in 2003, EDF's Tripp announced that "the environmental community and the energy industry must be partners as one part of creating the political will" for coastal restoration. The President of Shell Chemical echoed, "We must realize that we have been part of the problem and that we can be part of the solution." Essentially, oil and gas would fund the America's WETLAND Foundation campaign.<sup>119</sup> The WETLAND group focused their energies through a campaign entitled "America's Energy Coast" that issued a publication called "A Region at Risk" on the nation's vulnerable energy infrastructure. The main highway to reach Port Fourchon—a major hub at the edge of the Louisiana Coast that services offshore energy platforms—was vulnerable to environmental threats. "If broken by storms, floods or further erosion, it can disrupt the flow of goods and services that are the key to fueling America." Senator Mary Landrieu of Louisiana said,

When we lose resources so vital to our national security, it's as if we're under attack. We should respond accordingly. We would not allow a foreign power to threaten our land without a fight. Therefore, we should not allow a less obvious, but equally threatening power to take our land away.<sup>120</sup>

Members of America's WETLAND and the Governor's Advisory Commission regularly met with officials from the Army Corps of Engineers to develop a "Louisiana Coastal Area (LCA) Ecosystem Restoration Plan" which revived many projects in the Coast 2050 report such as large-scale river diversions and shoreline stabilization. In 2004, following a five-year, \$20 million study funded by the Army Corps of Engineers and Louisiana, the Corps released its LCA report and environmental assessment of the comprehensive coast-wide plan. "The talking points for Louisiana politicians and coastal advocates had clearly shifted from solely protecting environmental resources to preserving the coast for America's energy and economic needs."<sup>121</sup>

In late August 2005, Hurricane Katrina barreled down on the Gulf Coast and carried out the prophecies of the campaign. Damages from Katrina burnished the state's argument that its infrastructure was integral to the national energy and shipping sectors. Natural gas production through coastal Louisiana dropped by 50 and remained disrupted for months. Plants were damaged. Pipeline deliveries of gasoline, diesel and jet fuel to East Coast buyers were suspended. President Bush ordered the withdraw of emergency oil supplies from the Strategic Petroleum Reserve within salt dome caverns along the Louisiana and Texas coasts. Floodwaters swamped the low-lying highway to Port Fourchon, whose once green adjacent wetlands "resembled a vast open bay."<sup>122</sup> In the resulting debris and chaos, state officials found their evidence for a federal partnership. The economic disruption of Katrina and Rita highlighted the need to improve Louisiana's hurricane protection systems and restore the wetlands, "upon which so much of our national economy depends."<sup>123</sup> State officials folded the necessity of protect existing energy infrastructure into their long-term strategy for coastal restoration. Less than two years later, Congress approved Louisiana's long-sought after revenue-sharing agreement on offshore oil royalties, called Gulf of Mexico Energy Security Act (GOMESA) (overriding a presidential veto by George W. Bush) and thus enshrining the funding mechanism of the state's coastal restoration efforts to deep water drilling.<sup>124</sup>

## Conclusion

As groundbreaking as Coast2050 was in terms of its strategic and regional approach, coastal planners were unable to attract a federal partner without a financial calculus that dollars invested in coastal restoration would be justified through financial return. They had to quantify the value of the wetlands through its industrial productivity, which continues to limit imagined futures for the land. Today as part of any restoration argument, coastal advocates and industrial interests highlight the industrial productivity of the coast in order to justify financial returns on investment. This neoliberal rationale ties the preservation of the coast to the very practices causing its destruction. An emerging moniker of the “Working Coast” for the state’s linchpin issue provided talking points for saving the coast while eliding the problematic strategy of protecting an industry from the destruction it causes and tacitly shifting the financial burden of restoration onto the federal government and US taxpayers. While the plan traffics in discourses of “resilience” on behalf of some communities, it brackets off expectations of sacrifices by capital interests.



















Without curtailing drilling, the state leveraged the devastation wrought by Katrina and Rita to successfully renegotiate the state and federal royalty share through GOMESA, something they had failed to accomplish in 2000. They were able to build upon a legacy of extractive thinking by claiming damages caused by historic oil and gas drilling, which required some admission to the industry’s destruction and which they could presumably mitigate through further energy production. They aimed their ire at the Army Corps of Engineers’ leveeing of the Mississippi River, which is only one of several causes to coastal erosion and subsidence. As a result, they produced a plan that I argue rationalizes further activity and reproduces a need for future mitigation measures. In this way, the plan reproduces the conditions for its own possibility. It bolsters a political economic regime that reproduces itself through further interventions in the landscape. It justifies certain intervention efforts under the rationality of economic sustainability through the “Working Coast” that must be maintained as an engine of commerce.
















Through its flood protection levees and sediment diversion projects on the river, the Master Plan embeds itself into the land through what Chandra Mukerji frames as “territoriality” or governing from a distance—for all future decisions both scientific and political—to determine which areas to save and which areas to forgo, and how much sediment to divert, to the celebration of some industries and bane of others. Active measures to intervene and reverse coastal erosion are undertaken in order to continue extraction. So ultimately, the cycle continues. It’s part of an ongoing continuum of Louisiana’s political economy of extracting and exhausting its natural resources—from old growth timber and muskrat fur to fisheries and oil and gas.<sup>125</sup> Extracting resources from the land is part of the state’s identity, which provides the cultural cover of continued extraction if only to justify the ongoing governmentality of mitigation.















All of this begs a fundamental question of whether Louisiana can be separated from the economic rationalities that set the crisis in motion and justify an unending continuum of intervention. Simply, can Louisiana and New Orleans exist without a Working Coast that appears to be both sinking the coast and rationalizing a plan to maintain it? Can we envision the existence of New Orleans and Louisiana without their accompanying signs of extraction—that include not only deep draft shipping along the Mississippi River and a robust oil and gas and petrochemical industry, but also measures to mitigate its damage funded by the extraction itself? Or is Louisiana simply fated to become the Nation’s *disaster laboratory*, either a cautionary tale or model of resiliency for other governments facing the cross-hairs of the approaching onslaught caused by global climate change.

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[Bio](#)



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